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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/640,104	08/15/2000	Dirk Adolph	RCA 89,739	1502
24498 7590 06/12/2007 JOSEPH J. LAKS, VICE PRESIDENT THOMSON LICENSING LLC PATENT OPERATIONS PO BOX 5312 PRINCETON, NJ 08543-5312			EXAMINER BOCCIO, VINCENT F	
			ART UNIT 2165	PAPER NUMBER
			MAIL DATE 06/12/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/640,104

Applicant(s)

ADOLPH ET AL.

Examiner

Vincent F. Boccio

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment & RCE of 5/10/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-13 is/are rejected.
- 7) ☒ Claim(s) 7 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2165.

Response to Arguments

1. Applicant's arguments with respect to amended claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-2, 4-6, 9, 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teunissen (US 6,512,882).

Regarding claims 1, 5, 12, Teunissen discloses and meets the limitations associated with a method and/or device for

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reproducing a digital data stream containing program information for trick mode display (Fig. 4, col. 1, TRICK, fast forward & reverse), the method comprising:

- decoding incoming (Fig. 1);
- creating GOP history for more than one GOP (col. 2, Entry Points, "Start of GOP") and storing (col. 2, stored in Ram and/or Written to the Disk);
- editing (using Entry points) and decoding for trick mode display (upon reproduction Fig. 4 to Fig. 6, "VideoDEC 122"), controlling trick playback responsive to a trick mode controller (Fig. 4, Control Unit 80).

Further regarding claim 1, as applied Teunissen fails to particularly disclose decoding in normal play mode and creating the GOP entry points during a normal play mode of operation.

The difference between the prior art and the claimed invention is that Teunissen discloses a source of encoded video and the generation of Trick mode history data during recording, while the claims call for a reproduction operation, as a source.

The examiner takes official notice that it is notoriously well known to playback an MPEG encoded stream from a medium, being a source of MPEG encoded GOP data.

Therefore, it would have been obvious to one skilled of ordinary skill in the art at the time of the invention to provide a playback of MPEG GOP encoded video, from a medium, such as a Disk/Disc to provide a source of GOP data, to the entry point decoding processing system to generate the history data as Teunissen does, as is deemed obvious to one of ordinary skill in the art.

Regarding claims 2 and 9, Teunissen meets the limitations of maintaining and displaying a last decoded picture during step E) "decoding the digital data stream edited for trick mode display", met by col. 4, lines 43-45, "I-picture repeat N times", during trick mode editing operation.

Regarding claim 4 and 11, Teunissen fails to particularly disclose decoding a B frame without storing its content, but does not provide a frame buffer after decoding (see Fig. 6, decoder 122, with no frame buffer on the output of the decoder), therefore, meets the limitation of decoding a B frame without storing its contents, also see at col. 3, lines 23-26, "GOP ...

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during replay of complete GOPs, selectively bypassing a particularly B-picture".

Regarding claims 6 and 13, Teunissen meets the limitations of: receiving a trick mode command, acquiring the history, controlling data stream selection, enabling editing for trick mode (col. 4, lines 40-52, "jump to the next I picture") and displaying a picture (I) or a sequence of pictures for trick playback.

3. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teunissen (US 6,512,882) in view of Duruoze et al. (US 6,654,539).

Regarding claims 3 and 10, **Teunissen fails to particularly disclose** decoding invisible using two frame buffers and wherein using two frame buffers for storing the decoded bit streams.

Duruoze teaches using **at least two frame buffers** (col. 8, lines 1-18, "When there are more than three frame buffers") and further that during fast reverse to utilize the frame buffers in order to increase the likelihood that the most potential useful data in a free buffer will be overwritten after less potentially useful data in a free buffer is overwritten and further that with the buffers the system will decoding invisible met by decoding in the background, prior to use, as taught by Duruoze.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to modify **Teunissen** by incorporating at least two frame buffers to perform reverse as well as decoding as taught by **Duruoze** in order to increase the likelihood that the most potential useful data in a free buffer will be overwritten after less potentially useful data in a free buffer is overwritten.

Allowable Subject Matter

2. Claims 7 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record, fails to disclose, teach or fairly suggest the combination of limitations as recited including,

- receiving a command;;

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- acquiring the history;
- controlling data stream selection;
- editing the stream for trick mode;
- controlling the decoding and

adding a time stamp to the bit stream to provide display switching information.

Contact Information

Any inquiry concerning this communication or earlier communications should be directed to the examiner of record Vincent F. Boccio whose telephone number is (571) 272-7373.

The examiner can normally be reached on between Monday thru Friday between (7:30 am to 5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Primary Examiner, Boccio, Vincent
6/9/07


VINCENT BOCCIO
PRIMARY EXAMINER